ABSTRACT

The present invention provides a fluorescent molecular wire including a fluorescent polymer main chain to which an optically active substituent is linked so as to be a conjugatable form, the optically active substituent being represented by formula (I) below:

where R¹ represents a hydrogen atom or an alkyl group having 1 to 10 carbon atoms; R², R³, R⁴, R⁵, R⁶, R⁷, R⁸, and R⁹ represent independently a hydrogen atom, a linear alkyl group having 1 to 30 carbon atoms that may have a substituent, a branched alkyl group having 2 to 30 carbon atoms that may have a substituent, a cyclic alkyl group having 3 to 30 carbon atoms that may have a substituent, an aryl group having 6 to 30 carbon atoms that may have a substituent, or an aralkyl group having 7 to 30 carbon atoms that may have a substituent, and R³ and R⁷ may be bonded respectively to R⁴ and R⁸ to form an alkylene group having 2 to 60 carbon atoms that may have a substituent; and R¹⁰ and R¹¹ represent independently a hydrogen atom or an alkyl group having 1 to 15 carbon atoms that may have a heteroatom, and R¹⁰ and R¹¹ may be bonded to form an alkylene group having 2 to 30 carbon atoms that may have a heteroatom.